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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,836	09/13/2006	Daniel Willem Elisabeth Schobben	NLO40272	1011
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EXAMINER WOOLCOCK, LENWORTH A				
ART UNIT 2629		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/598,836

**Applicant(s)**

SCHOBEN ET AL.

**Examiner**

LENWORTH WOOLCOCK

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-17 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CIS)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 05/01/2007.

## **DETAILED ACTION**

### ***Specification***

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claim 15, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 12, 14, 15, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamazaki et al (US 2002/0079512).

Consider claims 1 and 16, Yamazaki discloses a scanning display apparatus, characterized in that the apparatus includes: a display operable: to receive one or more driver signals and generate corresponding visual information for presentation on the display (**see fig. 1, display portions receive driver signals and generate images**); and to sense radiation received at the display and generate one or more sensing signals corresponding to a region proximate to the display (**see fig. 1, sensing portion senses radiation from pen**); and computer hardware coupled to the display for generating the one or more driver signals for the display (**see fig. 1, display source and gate drivers**) and for receiving the one or more sensing signals from the display (**see fig. 1, sensor source and gate drivers**), the computer hardware being operable to provide an interactive user interface at the display (**see abstract**).

Consider claims 3 and 17, Yamazaki discloses generate light radiation for illuminating one or more objects placed in proximity to or on the display (**see par. [0053]**), and also for receiving at least part of the light radiation reflected from the one or more objects so as to enable the apparatus to assimilate a scanned image of the one or more objects (**see par. [0053]**).

Consider claim 4, Yamazaki discloses the computer hardware is operable to execute a first coarser scan to determine spatial location of the one or more objects on or in proximity of the display, and then execute a second finer scan to assimilate finer details of the one or more objects (**see par. [0291]**).

Consider claim 12, Yamazaki discloses the computer hardware in conjunction with the display is operable to identify one or more objects in proximity to or in contact

with the display and invoke one or more corresponding software applications for executing in the computer hardware in response to placement of the one or more objects **(see par. [0178])**.

Consider claim 14, Yamazaki discloses An apparatus according to Claim 1, wherein the display comprises one or more pixel devices (150) capable of both: generating or transmitting illumination **(see fig. 1, display portions receive driver signals and generate images)**; and sensing illuminating incident thereupon **(see fig. 1, sensing portion senses radiation from pen)**, the one or more pixel devices being fabricated using one or more of: liquid crystal display devices (LCD) with associated thin-film-transistors configured to function as a light sensor; and polyLED technology **(see par. [0034]-[0035])**.

Consider claim 15, Yamazaki discloses An apparatus (10) according to Claim 1 adapted for use in one or more of the following applications: (a) a contact type scanner; (b) webtables; (c) interactive tables, for example e-tables; (d) automatic vending machines control panels; (e) security access panels; (f) interactive control panels in vehicles; (g) electronic design drawing boards; (h) interactive advertisement or information displays; (i) childrens' interactive toys and games; (j) teaching aids; (k) television monitors; and (l) computer monitors **(see par. [0391])**.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al (US 2002/0079512) in view of Baur et al (US 5610629).

Consider claim 2, Yamazaki discloses identify positions of one or more objects placed in proximity of the display by way of illumination to the apparatus obscured by the one or more objects (**see par. [0053]**). Yamazaki discloses does not specifically disclose the illumination being ambient illumination. Baur discloses identify positions of one or more objects placed in proximity of the display by way of ambient illumination to the apparatus obscured by the one or more objects (**see col. 4 lines 20-28**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamazaki, and identify positions of one or more objects placed in proximity of the display by way of ambient illumination to the apparatus obscured by the one or more objects, as taught by Baur, thus providing a more energy efficient touch screen.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al (US 2002/0079512) in view of Yamamoto et al (US 5742279).

Consider claim 5, Yamazaki does not specifically disclose the computer hardware is operable to present a representation of the one or more objects in a region of the display in which the one or more objects were placed during scanning as confirmation of successfully completed scanning. Yamamoto discloses the computer hardware is operable to present a representation of the one or more objects in a region of the display in which the one or more objects were placed during scanning as confirmation of successfully completed scanning (**see col. 2 lines 15-22**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamazaki, and have the computer hardware is operable to present a representation of the one or more objects in a region of the display in which the one or more objects were placed during scanning as confirmation of successfully completed scanning, as taught by Yamamoto, thus allowing the user to directly conduct an operation and instructions on the display screen, as discussed by Yamamoto (**see col. 2 lines 15-22**).

Claims 6, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al (US 2002/0079512) in view of Macinnes et al (WO 00/75766).

Consider claim 6, Yamazaki discloses the apparatus being operable to sense one or more objects when placed upon or positioned in proximity to the display and obscuring at least part of the display (**see abstract and par. [0053]**). Yamazaki does

not specifically disclose adapting the user interface to use those parts of the display which are unobscured. Macinnes discloses adapting the user interface to use those parts of the display which are unobscured (**see fig. 5 and page 9, last paragraph**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamazaki, and adapt the user interface to use those parts of the display which are unobscured, as taught by Macinnes, thus avoiding accidental selection of an undesired selectable option, as discussed by Macinnes (**see page 3, last paragraph**).

Consider claim 11, Yamazaki discloses presenting the user interface comprising a plurality of user interface features (**see par. [0002]**). Yamazaki does not specifically disclose the computer hardware being provided with a priority identifier for each of the features determining which of the features to omit from presentation in the user interface in a situation where at least part of the display is obscured. Macinnes discloses the computer hardware being provided with a priority identifier for each of the features determining which of the features to omit from presentation in the user interface in a situation where at least part of the display is obscured (**see fig. 5 and page 9, last paragraph**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamazaki, and have the computer hardware being provided with a priority identifier for each of the features determining which of the features to omit from presentation in the user interface in a situation where at least part of the display is obscured, as taught by Macinnes, thus avoiding accidental selection of



an undesired selectable option, as discussed by Macinnes (**see page 3, last paragraph**).

Consider claim 13, Yamazaki discloses the limitations of claim 12. Yamazaki does not specifically disclose the one or more software applications are operable to generate one or more animated icons on the display which appear in surrounding spatial proximity to the one or more objects placed on the display, thereby providing a visual acknowledgement that the computer hardware has identified presence of the one or more objects. Macinnes discloses the one or more software applications are operable to generate one or more animated icons on the display which appear in surrounding spatial proximity to the one or more objects placed on the display, thereby providing a visual acknowledgement that the computer hardware has identified presence of the one or more objects (**see fig. 5**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamazaki, and have the one or more software applications are operable to generate one or more animated icons on the display which appear in surrounding spatial proximity to the one or more objects placed on the display, thereby providing a visual acknowledgement that the computer hardware has identified presence of the one or more objects, as taught by Macinnes, thus avoiding accidental selection of an undesired selectable option, as discussed by Macinnes (**see page 3, last paragraph**).

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al (US 2002/0079512) in view of Macinnes et al (WO 00/75766) in further view of Rodden et al (US 6473102).

Consider claim 8, Yamazaki and Macinnes discloses the apparatus of claim 6. Yamazaki and Macinnes do not specifically disclose the apparatus arranged to present the user interface in squeezed format when an unobscured active region of the display is insufficiently large to include all of the user interface. Rodden discloses an apparatus arranged to present the user interface in squeezed format when an unobscured active region of the display is insufficiently large to include all of the user interface (**see col. 1, lines 53-67**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamazaki and Macinnes, and have the apparatus arranged to present the user interface in squeezed format when an unobscured active region of the display is insufficiently large to include all of the user interface, as taught by Rodden, thus allowing all of the interface to be displayed, as discussed by Rodden (**see abstract**).

Consider claim 9, Rodden discloses the user interface includes a scrolling feature for use in accessing squeezed parts of the user interface presented on the display (**see col. 2 lines 1-11**).

Consider claim 10, Yamazaki and Macinnes discloses the apparatus of claim 6. Yamazaki and Macinnes do not specifically disclose a minimum display size limit for the user interface is defined in the computer hardware, such that obscuring more of the

display than defined by the display size limit causes the computer hardware to present at least part of the user interface in a squeezed format. Rodden discloses a minimum display size limit for the user interface is defined in the computer hardware, such that obscuring more of the display than defined by the display size limit causes the computer hardware to present at least part of the user interface in a squeezed format (**see col. 1, lines 53-67**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Yamazaki and Macinnes, and have a minimum display size limit for the user interface is defined in the computer hardware, such that obscuring more of the display than defined by the display size limit causes the computer hardware to present at least part of the user interface in a squeezed format, as taught by Rodden, thus allowing all of the interface to be displayed, as discussed by Rodden (**see abstract**).

#### ***Allowable Subject Matter***

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 7 depends on claim 6, which has been rejected. However, The prior art fails to teach or suggest "the computer hardware being operable to de-energize those parts of the display which are obscured by one or more objects placed thereupon for reducing power dissipation within the display". It does not appear obvious to do so,

therefore, if rewritten with all the limitations of the base and intervening claims would be allowable.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LENWORTH WOOLCOCK whose telephone number is (571)270-5152. The examiner can normally be reached on M-F 8:30am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lenworth Woolcock/  
Examiner, Art Unit 2629  
/Amare Mengistu/

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Supervisory Patent Examiner, Art Unit 2629